Air Quality Ozone Monitoring Infrastructure (Wasatch Front) - Fact Sheet

Ozone in the air we breathe can harm our health, especially on hot sunny days when ozone can reach unhealthy levels. People most at risk from breathing air containing ozone include people with asthma, children, older adults, and people who are active outdoors, especially outdoor workers.

The monitored values of summer ozone along the Wasatch Front are currently in violation of the National Ambient Air Quality Standard for Ozone.

Ground level ozone, is not emitted directly into the air, but is created by chemical reactions

OZONE

NOx + VOC + Heat & Sunlight = Ozone
Ground-level or "bad" ozone is not emitted directly into the air, but is created by chemical reactions between NOx and VOCs in the presence of heat & sunlight.

Emissions from industrial facilities and electric utilities, motor vehicle exhaust, gasoline vapors, and chemical solvents are some of the major sources of oxides of nitrogen (NOx) and volatile organic compounds (VOC).

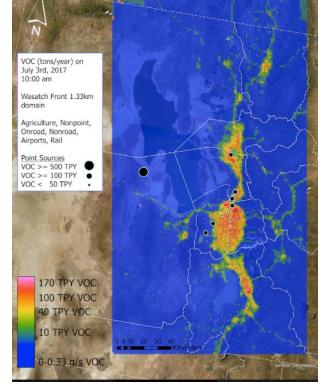
between oxides of nitrogen (NOx) and volatile organic compounds (VOC). This happens when vapor, solvent and combustion pollutants emitted by cars, trucks, power plants, industrial boilers, refineries, chemical plants, homes and businesses chemically react in the presence of heat and intense sunlight.

Salt Lake, Utah, Tooele Davis and Weber counties have been designated by the EPA as "nonattainment"

for the 2015 ozone standard.

The Department of Environmental Quality's Division of Air Quality is currently working to create a State Implementation Plan (SIP) to bring the area back into attainment with the standard. An important component of that planning effort is to understand how precursor emissions are interacting in the atmosphere to create ozone. Understanding the chemistry will directly lead to tailored reductions that solve the ozone problem and reduce the chance that costly controls will be implemented that do not directly result in improved air quality.

A Photochemical Assessment Monitoring System (PAMS for short) is an array of air monitors that collect chemical speciation information for all ozone precursors and environmental conditions in real time. Because the emissions rates and composition vary greatly around the valley, a network of PAMS monitors that is spread geographically is needed to collect the needed information.



Request - \$3,235.600 One-time and \$1,005.000 Ongoing to site, install and operate 6 Photochemical Assessment Monitoring Systems along the Wasatch Front